

April 5, 2021

Mr. Austin F. Callwood, Director Division of Environmental Protection Department of Planning & Natural Resources 45 Mars Hill Frederiksted, V.I. 00840-4474

SUBJECT: No. 8 Flare H₂S Exceedance - March 29, 2021 to March 30, 2021

Dear Mr. Callwood:

This letter is submitted in compliance with Condition No. 2.4.5.1 of Limetree Bay Title V permit as a follow-up to the email notifications to Ms. Verline Marcellin of the Division of Environmental Protection on Monday, March 29, 2021 at 11:29 PM regarding the H₂S exceedances at the No. 8 Flare.

The Continuous Emissions Monitoring System (CEMS) recorded H₂S concentrations in the No. 8 Flare in excess of 0.1 gr/dscf (162 ppm) based on a 3-hr rolling average (ref. Title V permit condition 3.2.5.5 & 3.2.5.6) from March 29th to 30th, 2021.

The following table provides 3-hr H₂S concentrations at the No. 8 Flare during the exceedance events.

Source Parameter Unit		FLARE08 H2SPPMD (PPM)	Source Parameter Unit		FLARE08	Source Parameter Unit		FLARE08 H2SPPMD (PPM)
					H2SPPMD (PPM)			
03/29/21	20:00	79.5	03/30/21	03:00	259.4	03/30/21	10:00	166.7
03/29/21	21:00	122.0	03/30/21	04:00	233.4	03/30/21	11:00	166.7
03/29/21	22:00	180.5	03/30/21	05:00	232.3	03/30/21	12:00	166.7
03/29/21	23:00	182.8	03/30/21	06:00	241.3	03/30/21	13:00	166.7
03/30/21	00:00	213.4	03/30/21	07:00	226.3	03/30/21	14:00	151.6
03/30/21	01:00	228.5	03/30/21	08:00	178.5	03/30/21	15:00	146.7
03/30/21	02:00	284.0	03/30/21	09:00	151.2	03/30/21	16:00	132.7

On March 29, 2021, in an attempt to reduce the H₂S levels in the fuel gas, Operations shut down the compressors at the No. 2 Gas Recovery Unit (2GRU) in order to stop recycling high H₂S fuel gas. Next, Operations introduced clean fuel gas to 2GRU to purge any residual high H₂S fuel gas in the system which vented to the No. 8 Flare. While 2GRU was purging, the fuel gas balance drums had high liquid levels which Operations drained to the No. 8 Flare as well. Both situations caused the high levels of H₂S at the No. 8 Flare. Subsequently, in an effort to address the overall H₂S issues at the facility, Operations decided to place process units offline or on circulation while maintenance is performed on the No. 4 and No.5 Amine Regeneration Units (ARU). Upon opening the tower in No. 4 ARU, the seal pan that provides flow to the reboilers and allows amine to be regenerated in order to scrub H₂S, was found dislodged and at the bottom of the tower. No. 5 ARU will also be opened and repairs made as necessary.

If you have any questions or need additional information, please contact Maria Aloyo at (340) 692-3781.

Sincerely,

Robert Weldzius

Senior Vice President, Refining Limetree Bay Refining, LLC

Electronic copy: Verline Marcellin (DPNR)

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Mr. Austin Callwood, Director
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